

John E. Pearson
Materials Engineer
Materials Science Division, 223/B137
Argonne National Laboratory
9700 South Cass Avenue
Argonne, IL 60439
Phone: (630) 252-7738 Fax: (630) 252-9595
e-mail: pearson@anl.gov

Education	M.S. degree in Engineering Mechanics and Materials from Southern Illinois University at Carbondale. (1987) (Thesis Title: Elastic Softening and Structural Changes of Silicon and Zr ₃ Al due to Ion Irradiation)																	
	B.S. degree in Engineering Mechanics and Materials with a minor in Mathematics from Southern Illinois University at Carbondale. (1985)																	
Awards and Honors	Outstanding Scientific Accomplishment in Solid State Physics category in the Department of Energy's Materials Sciences Research Competition. (1992)																	
	Recipient of UChicago Argonne, LLC Board of Governors, Outstanding Service Award (2008)																	
Professional Experience	<table><tr><td>Principal Materials Engineer</td><td>Materials Science Division, Argonne National Laboratory</td><td>(2009 – present)</td></tr><tr><td>Engineer</td><td>Materials Science Division, Argonne National Laboratory</td><td>(2005 – 2009)</td></tr><tr><td>Senior Scientific Associate</td><td>Materials Science Division, Argonne National Laboratory</td><td>(2000 – 2005)</td></tr><tr><td>Scientific Associate</td><td>Materials Science Division, Argonne National Laboratory</td><td>(1994 – 2000)</td></tr><tr><td>Scientific Assistant</td><td>Materials Science Division, Argonne National Laboratory</td><td>(1987 – 1994)</td></tr></table>			Principal Materials Engineer	Materials Science Division, Argonne National Laboratory	(2009 – present)	Engineer	Materials Science Division, Argonne National Laboratory	(2005 – 2009)	Senior Scientific Associate	Materials Science Division, Argonne National Laboratory	(2000 – 2005)	Scientific Associate	Materials Science Division, Argonne National Laboratory	(1994 – 2000)	Scientific Assistant	Materials Science Division, Argonne National Laboratory	(1987 – 1994)
Principal Materials Engineer	Materials Science Division, Argonne National Laboratory	(2009 – present)																
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Senior Scientific Associate	Materials Science Division, Argonne National Laboratory	(2000 – 2005)																
Scientific Associate	Materials Science Division, Argonne National Laboratory	(1994 – 2000)																
Scientific Assistant	Materials Science Division, Argonne National Laboratory	(1987 – 1994)																
Collaborators	S. Jain (Hitachi), K. Buchanan (Colorado State Univ), G. Karapetrov (Drexel Univ), M. Iavarone (Temple Univ.), C. Chang (Univ. Chicago)																	
Graduate Advisors	Dr Jarlen Don (Southern Illinois University), Dr. Lynn Rehn and Dr. Paul Okamoto (Argonne National Laboratory)																	
Patents:	US Patent 7,427,755 Integrated Electron Beam Tip and Sample Heating Device for a Scanning Tunneling Microscope																	

Selected Publications: (190 publications, 6000 citations, h-factor = 41)

Insulating nanomagnets driven by spin torque

M. B. Jungfleisch, J. Ding, W. Zhang, W. Jiang, J. E. Pearson, V. Novosad, and A. Hoffmann,
Nano Letters 17, (1), pp 8-14 (2016).

Direct Observation of the Skyrmion Hall Effect

W. Jiang, X. Zhang, G. Yu, W. Zhang, X. Wang, M. B. Jungfleisch, J. E. Pearson, X. Cheng, O. Heinonen,
K. L. Wang, Y. Zhou, A. Hoffmann, and S. G.E. te Velthuis,
Nature Physics, doi:10.1038/nphys3883 (2016).

Rewritable artificial magnetic charge ice

Wang, YL; Xiao, ZL; Snezhko, A.; Xu, J.; Ocola, L E.; Divan, R.; Pearson, J. E.; Crabtree, G W.;
Kwok, WK
SCIENCE Volume: 352 Issue: 6288 p. 962-966 Published: May 2016

Wanjun Jiang, P. Upadhyaya, W. Zhang, G. Yu, M.B. Jungfleisch, F.Y. Fradin, J.E. Pearson, Y.
Tserkovnyak, K.L. Wang, O. Heinonen, S.G.E. te Velthuis, A. Hoffmann,

“Magnetism. Blowing magnetic skyrmion bubbles”,
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W. Zhang, M.B. Jungfleisch, W. Jiang, J.E. Pearson, A. Hoffmann, F. Freimuth, Y. Mokrousov
“Spin Hall Effects in Metallic Antiferromagnets”,
Phys. Rev. Lett. **113**, 196602 (2014).

K. Vogt, F.Y. Fradin, J.E. Pearson, T. Sebastian, S.D. Bader, B. Hillebrands, A. Hoffmann, H. Schultheiss,
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L. Y. Zhu, Yaohua Liu, F. S. Bergeret, J.E. Pearson, S. G. E. te Velthuis, S. D. Bader, J.S. Jiang,
“Unanticipated Proximity Behavior in Ferromagnet-Superconductor Heterostructures with Controlled
Magnetic Noncollinearity”,
Phys. Rev. Lett. **110**, 177001 (2013).

S. Jain, V. Novosad, Y. Fradin, J. E. Pearson, V. Tiberkevich, A. N. Slavin and S. D. Bader,
“From chaos to selective ordering of vortex cores in interacting mesomagnets”,
Nature Comm., **3**, 1330 (2012).

H. Schultheiss, J. E. Pearson, S. D. Bader, A. Hoffmann,
“Thermoelectric detection of spin waves”,
Phys. Rev. Lett. **109**, 237204 (2012).

C. Wang, D. van der Vliet, K.L. More, N.J. Zaluzec, S. Peng, S. Sun, H. Daimon, G. Wang, J. Greeley, J.
Pearson, A.P. Paulikas, G. Karapetrov, D. Strmcnik, N.M. Markovic, V.R. Stamenkovic,
“Multimetallic Au/FePt₃ nanoparticles as highly durable electrocatalyst”,
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C. Wang, M. Chi, D. Li, D. Strmcnik, D. van der Vliet, G. Wang, V. Komanicky, K.C. Chang, A.P. Paulikas, D. Tripkovic, J. Pearson, K.L. More, N.M. Markovic, V.R. Stamenkovic,
“Design and synthesis of bimetallic electrocatalyst with multilayered pt-skin surfaces”,
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O. Mosendz, J.E. Pearson, F.Y. Fradin, et al.
“Quantifying spin Hall angles from spin pumping: experiments and theory”,
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“Subwavelength Focusing and Guiding of Surface Plasmons”,
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